

Inside Wallops

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NASA Balloon Makes Record-Breaking Flight

Flying near the edge of space, a NASA scientific balloon has broken the previous flight record for duration and distance with a flight of nearly 42 days, traveling three orbits around the South Pole.

The record-breaking balloon carried the Cosmic Ray Energetics And Mass (CREAM) experiment, designed to explore the supernova acceleration limit of cosmic rays, the relativistic gas of protons, electrons and heavy nuclei arriving at Earth from outside the solar system. In addition to gathering scientific data, the flight is a demonstration of the NASA Ultra-Long Duration Balloon (ULDB) support system capabilities. The ULDB is being developed to extend flights up to 100 days.

"Balloon-borne detectors flying at the top of the atmosphere can identify incoming particles before they are broken up in collisions with air nuclei," said Eun Suk Seo, the Principal Investigator for CREAM at University of Maryland, College Park.

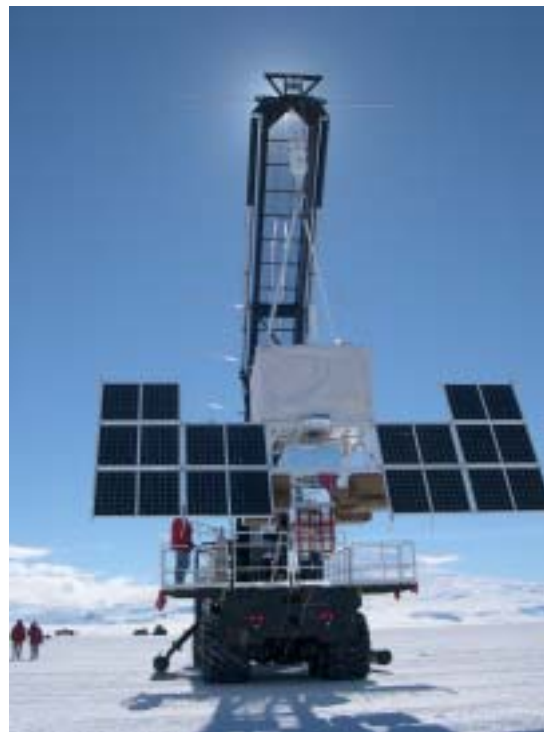
"These state-of-the-art particle detectors were for the most part built in university laboratories by students and young scientists and engineers", said Dr. W. Vernon Jones, Senior Scientist for Suborbital Research at NASA Headquarters.

The scientific balloon was launched from the National Science Foundation's McMurdo Station, Antarctica on Dec. 16, and traveled 41 days, 22 hours, landing on January 27, 410 miles from McMurdo Station. The payload was recovered.

The previous endurance record for a long duration balloon flight was in December 2001 from McMurdo. The flight was for two orbits of the South Pole that lasted 31 days, 20 hours. The CREAM mission was able to extend the amount of continuous science observational time over any previous balloon mission.

"We are excited with the duration of this flight which allowed the scientists to get ample science to perform their studies," said David Pierce, Chief of the Balloon Program Office. "We routinely have long duration balloons that float for up to two weeks, but to have one flight last for more than 41 days is very rewarding."

An enormous balloon was needed to hoist the two-ton CREAM experiment to about 125,000 feet.



Univ. of Maryland Photo

The CREAM experiment readied for flight.

The balloon used for this Antarctica flight expanded to a diameter of more than 450 feet and weighed 4,055 pounds.

Personnel from the National Scientific Balloon Facility, Palestine, Texas, conducted the launch, flight and recovery operations of the CREAM balloon mission. "We are really proud of our crew in Antarctica," said Danny Ball, Site Manager of the Texas facility. "Everyone at NSBF has contributed to this success,

but the crew that spent Thanksgiving, Christmas, and New Years on the "ice" deserves most of the credit for a great mission and yet another record flight."

Antarctica ground and air operations support was provided by the National Science Foundation's Office of Polar Programs.

The CREAM experiment is a collaboration among the University of Maryland, the University of Chicago, Penn State University and universities and organizations in Italy, Korea, France and Mexico.

For pictures and information on the CREAM mission visit:
<http://cosmicray.umd.edu/cream/CREAMflight.htm>

Wallops Shorts.....

In the News

SpaceRef.com

"NASA Research Balloon Makes Record Breaking Flight Over Antarctica"

SpaceFlight Now

"NASA Research Balloon Makes Record Flight"

Live Science

"Huge Helium Balloon Sets High-Flying Record"

Engineer's Week is February 20 - 26

This is an excellent time to talk to children about the opportunities and careers in science, technology, engineering and math.

Contact your local school and volunteer to help enlighten students on the benefits of continued education. Your child's teacher is the best source of information on topics to present

For more information or material, contact Ed Parrott at x1681.

Mentoring Program

The Wallops Mentoring Program is an excellent opportunity for Wallops employees to benefit from developing a mentoring relationship. The program provides many opportunities for participants to interact with employees at different levels, increase organizational awareness, and enhance technical knowledge.

The objective of the Mentoring Program is career development and enhancement, knowledge management, and skills development.

Through the program employees have an opportunity for personal growth that, potentially, can lead to higher job satisfaction, greater efficiency, and consideration of career options.

The Wallops program will be a mix of formal and informal mentoring. Some mentor/mentee teams will commit to a full-year partnership while others may choose to have a shorter arrangement.

A general orientation will be held on February 22 from 1 to 3 p.m. in Building E-104, Room 310 for anyone interested in the program as well as those wishing to register as a mentor or mentee.

As part of the mentoring partnership, the mentor and mentee develop an Action Plan and establish a contract outlining how

often they will meet, rules for confidentiality, and methods of interaction.

There will be a Dynamic Mentoring Workshop to assist employees with establishing an effective mentor/mentee relationship.

A Mid-Point Evaluation will identify areas where change is required and a Final Evaluation will help OHR determine the effectiveness of the program. Other optional training and/or brown bag lunches may be offered based on participants' needs and preferences.

Register online through February 28 at: <http://www.mentoringconnection.com> Click on the Sign-Up button and enter the demographic data. The Group ID is: GSFC2005.

Questions should be directed to Mark Goldman at x66-8852 or by e-mail: mark.s.goldman@nasa.gov

Annual Dinner

Tickets are still available for the Black History Club's, evening of dinner and entertainment -- "The African Diaspora", featuring guest speaker, Dr. Clara Small from Salisbury University on February 19. Contact Cheryl Johnson, x1607; Rebecca Beach, x1625 or David Smith, x1316.

Civil Service Travel Reminder

NASA civil servants that perform official international travel are required to obtain a medical clearance from the Occupational Health Unit prior to departure. This requirement is in compliance with NPD 1810.1, Health Services for International Travel or Assignment.

Travelers may use the services of the Wallops Health Unit, Building F-160, or of a private physician. If a traveler selects a private physician, the traveler must provide a completed NF 1711 to the Health Unit that will become part of the employee's medical record. Medical information provided to the Health Unit falls under the Privacy act and will be guarded as such.

If the traveler chooses to use the Health Unit services, the purpose of the visit

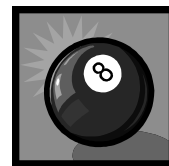
should be clear; to ensure that the traveler is fit for international travel. This means making sure that necessary physical examinations and immunizations are current. It is the traveler's responsibility to secure the requisite information and clearance prior to departing on international travel.

Scheduling and completing a physical exam takes time. More importantly, immunity to deadly diseases, induced by vaccines, takes time to be effective.

International travelers should contact the Health Unit at least 4 to 6 weeks prior to departure to prevent any delays in obtaining the necessary clearance and authorization to travel.

Contact the Wallops Health Unit at x1266.

8-ball Double Elimination Pool Tournament



5:30 p.m. start time
Friday, February 11

Building F-3, Rocket Club

\$5 entry with 70/30 split to first and second place

For more information contact Rob Cass at x2376 or by email: robert.cass.1@gsfc.nasa.gov

SuperBowl
Sunday
at the
Rocket Club



February 6, 2005



New England
Patriots vs
Philadelphia
Eagles

Bring a covered dish to share
Kickoff at 6:30 p.m.
Doors open at 5:30 p.m.
Building F-3
Contact: Mike Barnhill, x1641

Fitness Club Membership

It is time to renew membership in the Wallops Fitness Club.

Renewal dues are \$20. First time membership dues are \$20 plus a \$5 card deposit.

The key card lock for the Fitness Club will be changed Wednesday, February 9.

To purchase a new key card contact: Wallops Exchange, x2020; Robert Tittle, x1244; Tom Wilson, x1570; or John Gerlach, x1515.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov
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